

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Boz 1450 Alexandria, Viginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/383,629	08/26/1999	MAZDA SALMANIAN	71493-582	6818	
7	590 09/11/2003				
SMART & BIGGAR			EXAMINER		
	CALFE STREET		LEVITAN, DMITRY		
OTTAWA, K CANADA	KIPJIP		ART UNIT	PAPER NUMBER	
			2662 DATE MAILED: 09/11/2003	DATE MAILED: 09/11/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

			Z
	Application No.	Applicant(s)	
	09/383,629	SALMANIAN, MAZDA	
Office Action Summary	Examiner	Art Unit	
	Dmitry Levitan	2662	_
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with t	he correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply of within the statutory minimum of thirty (30 will apply and will expire SIX (6) MONTHS, cause the application to become ABAND	be timely filed) days will be considered timely. from the mailing date of this communication. ONED (35 U.S.C. § 133).	
1) Responsive to communication(s) filed on	<u> </u>		
2a) ☐ This action is FINAL . 2b) ☑ Th	is action is non-final.		
3) Since this application is in condition for allowated closed in accordance with the practice under Disposition of Claims			
4) Claim(s) 1-16 and 18-20 is/are pending in the	application.		
4a) Of the above claim(s) is/are withdraw	wn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-4,10,14-16 and 18-20</u> is/are rejecte	d.		
7) \boxtimes Claim(s) <u>5-9,11-13</u> is/are objected to.			
8) Claim(s) are subject to restriction and/o	r election requirement.		
Application Papers			
9) The specification is objected to by the Examine			
10) The drawing(s) filed on is/are: a) accept			
Applicant may not request that any objection to the	• • • • • • • • • • • • • • • • • • • •	• •	
11) The proposed drawing correction filed on If approved, corrected drawings are required in rep		oproved by the Examiner.	
12)☐ The oath or declaration is objected to by the Ex	•		
Priority under 35 U.S.C. §§ 119 and 120	arrinter.		
13) Acknowledgment is made of a claim for foreign	nrigity under 35 LLC C & 11	19(a) (d) or (f)	
a) ☐ All b) ☐ Some * c) ☐ None of:	i priority under 35 0.5.6. § 11	19(a)-(u) 01 (1).	
1.☐ Certified copies of the priority document:	s have been received		
2. Certified copies of the priority documents		cation No	
Copies of the certified copies of the prior application from the International Bu See the attached detailed Office action for a list	rity documents have been rec reau (PCT Rule 17.2(a)).	eived in this National Stage	
14) ☐ Acknowledgment is made of a claim for domesti	•		
a) ☐ The translation of the foreign language pro		• •	•
15) Acknowledgment is made of a claim for domesti			,
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Infor	mary (PTO-413) Paper No(s) mal Patent Application (PTO-152)	
Patent and Imdemed Off			

Art Unit: 2662

The finality of the previous Office action is withdrawn. The prosecution of this application is reopened to clarify the status of claims 14-16 which are considered unpatentable over the prior art of record for the reasons indicated below.

Applicant's amendment filed on 5/20/03, has been entered. Claims 1-16 and 18-20 remain pending.

Claim Rejections - 35 USC § 112

- 1. Claim 14 rejection under 35 USC 112 first paragraph, has been withdrawn.
- 2. Claims 14-16 rejection under 35 USC 112 second paragraph, has been withdrawn.

Claim Rejections - 35 USC § 103

3. Claims 1-4, 10, 14-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholefield (US 6,216,006) in view of Berning (US 5,740,537).

Regarding claims 1, 14-16, 18 and 19, Scholefield teaches all claim limitation of a method and computer code of performing call admission control upon a receipt of a request for a new session comprising:

Making an estimate of a new system QoS (network measured load 30 and effective bandwidth 32 on Fig.2 and 3 and col. 2 lines 64-67, col. 3 lines 1-50) which will result should new session be admitted (recursive estimator on Fig. 4 and col. 4 lines 6-17); and

Deciding to admit or deny the new session on the basis of the new system QoS estimate (testing col. 3 lines 54-57).

Application/Control Number: 09/383,629

Art Unit: 2662

Regarding claims 2 and 20, Scholefield teaches making an estimate of a previous system QoS (network measured load 30 on Fig. 3 and col. 3 lines 58-67);

Determining the estimate of a degradation in the system should new session be admitted (network measured load 30 plus effective bandwidth of new service request 32 on Fig. 3); and Combining the estimate of degradation to the previous system QoS to obtain the estimate of total system (un-used bandwidth 36 on Fig. 3 and col.4 lines 1-5).

Regarding claim 3, Scholefield teaches making an estimate of a previous system QoS at the time of the request comprises measuring the system QoS (col. 4 lines 34-48)

Regarding claim 4, Scholefield teaches starting with previous system QoS equal to initial system QoS (admission grant on Fig. 1 and col. 4 lines 33-35);

Each time a session is admitted or ended adjusting a degradation reduction for the session from the previous system QoS (step 160 on Fig. 1 and col. 4 lines 35-48).

Regarding claim 10, Scholefield teaches comparing the new QoS estimate (network measured load 30 and effective bandwidth 32 on Fig. 3 col. 3 lines 58-67) to a target QoS (theoretical channel capacity 34 on Fig. 3 and col. 4 lines 1-5) and admitting or denying the session based on the comparison.

Scholefield does not teach using frame error rates (FER) as a QoS determiner.

Beming teaches using frame error rates (FER) as a QoS determiner (col. 6 lines 45-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using frame error rates (FER) as a QoS determiner of Beming to the system of Scholefield to improve the system performance in interference environment.

Application/Control Number: 09/383,629

Art Unit: 2662

Page 4

In addition, regarding claim 14, Scholefield does not teach using MAC layer to implement the

admission control system.

Official Notice is taken that MAC layer implementation is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made

to add using MAC layer to implement the admission control system to the system of Scholefield

to improve the system performance with other MAC using equipment.

In addition, regarding claims 14-16, Scholefield does not teach using base station, and call

admission block in his system.

Beming teaches using base station, and call admission block (control device 22 on Fig. 1 and

col. 5 lines 45-55). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to add using base station, and call admission block of Beming to the system

of Scholefield to incorporate the system method.

In addition, regarding claim 18, Scholefield does not teach using an input device and a

processing element in his system.

Beming teaches using an input device (communication quality determiner 24 on Fig. 1 and col. 5

lines 45-55) and a processing element (additional call admitter 28 on Fig. 1 and col. 5 lines 55-

62, col. 6 lines 45-54). It would have been obvious to one of ordinary skill in the art at the time

the invention was made to add using an input device and a processing element of Beming to the

system of Scholefield to incorporate the system method.

Application/Control Number: 09/383,629

Art Unit: 2662

Page 5

Allowable Subject Matter

4. Claims 5-9 and 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed August 28, 2003 have been fully considered but they are not persuasive.

Applicant argues that Scholefield does not teach using QoS at all in performance call admission.

Examiner respectfully disagrees.

Scholefield teaches using effective bandwidth as a function of QoS traffic descriptors as mean bit rate, peak beat rate and delay (Fig. 2 and col. 3 lines 9-40) and estimate the effective bandwidth of the system to meet QoS requirements (col. 3 lines 23-25). Sum of the effective bandwidths (30 and 32 on Fig. 3) provides users with required QoS levels (col. 2 lines 64-66 and col. 3 lines 1-8).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is 703-305-4384. The examiner can normally be reached on 8:30 to 4:30.

Art Unit: 2662

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Dmitry Levitan Patent Examiner. 09/10/03.

> SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600